

AMENDMENTS TO THE DRAWINGS:

Applicants respectfully request admission of replacement FIG. 1 A through D and replacement FIG. 2 A through E as attached hereto.

REMARKS

The Office communication mailed August 7, 2007, has been received and reviewed. Claims 16, 30, 33-35, and 38-42 stand rejected. The application is to be amended as previously set forth. All amendments and cancellations are made without prejudice. No new matter has been added. Reconsideration is respectfully requested.

Objections (items 4-7)

In response to the Objection to the Abstract (item 4), applicants have amended the abstract which now contains less than 150 words as disclosed herein. Accordingly, applicants respectfully request withdrawal of the objection.

In response to the Objection to the drawings (item 5), applicants have submitted replacement FIG. 1 A through D and replacement FIG. 2 A through E. Accordingly, applicants respectfully request withdrawal of the objection.

In response to the Objection to the specification (item 6), applicants have amended the specification, deleting the embedded hyperlinks as required by MPEP § 608.01. Accordingly, applicants respectfully request withdrawal of the objection.

In response to the Objection to claim 39 (item 7), applicants have canceled claim 39 as herein set forth. Accordingly, applicants respectfully request withdrawal of the objection.

Rejections under second paragraph of 35 U.S.C. § 112 (items 8-9)

The Examiner has rejected claim 16 because the recitation “9 kD” is indefinite in the absence of a recitation of the technique used to establish the molecular weight. In response, applicants have amended claim 16 to include “as determined by gel electrophoresis on a polyacrylamide gel.” Support for the amendment may be found in paragraphs 16 and 180 of the specification as published (US 2005/0232937).

Additionally, the Examiner rejected claim 40 as lacking antecedent basis from claim 39. In response, claim 40 has been amended as drawn to a vaccine claim.

Accordingly, applicants respectfully request withdrawal of the rejections.

Rejections under second paragraph of 35 U.S.C. § 112 (items 10-11)

The Examiner rejected Claims 30, 33-35, and 38-42 as failing to comply with the written description requirement. Specifically, the Examiner rejected claims 30, 33-35, and 40-42 for including “composition”, as assertedly there is no reference to a composition in the applicants’ specification. In response, applicants have amended claims 30, 33-35, and 40-42 to include “vaccine.”

Additionally, the Examiner rejected claims 38-40 as assertedly not having support in the specification for peptide with homology to SEQ ID NO:6. In response, applicants have amended claims 38 and 40, and canceled claim 39. Claims 38 and 40 now both include a “9kD *Mycobacterium avium* subspecies *paratuberculosis*” peptide.

Accordingly, applicants respectfully request withdrawal of the rejections.

Rejections under 35 U.S.C. § 102(e) (item 13-14):

The Examiner has rejected claims 16, 30, 33, and 38-42 under 35 U.S.C. § 102(e) as being anticipated by Kapur et al. (US 2007/0042383). Applicants respectfully traverse as herein set forth.

Applicants note that “a claim is only anticipated if each and every [element] as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Additionally, to be anticipated under 35 U.S.C. § 102(e), the invention must have been described in another patent or patent application filed before the invention by the applicant in the United States or in an international application under Article 21(2). *See* 35 U.S.C. § 102(e).

Applicants respectfully submit that Kapur et al. (US 2007/0042383) is not valid prior art with regards to “SEQ ID NO:2498”, as “SEQ ID NO:2498” and its corresponding sequence information was incorporated into the 2007/0042383 application after the applicants’ priority date. Specifically, SEQ ID NO:2498 is present in the Kapur PCT application “PCT/IB03/06509” that was filed on March 6, 2003. However, SEQ ID NO:2498 or its corresponding sequence information, are not present or disclosed anywhere in the parent application “10/137,113”, filed on April 30, 2002. Additionally, there is no disclosure of SEQ ID NO:2498 or its corresponding sequence information, in its parent provisional application, 60/362,396. (Information gathered

from “Continuity Data” found via the PAIR system available at uspto.gov). Accordingly, the priority date for Kapur with regards to the subject matter related to SEQ ID NO:2498 is March 6, 2003.

Applicants submit the priority date of applicants’ application is prior to March 6, 2003. The priority date of applicants’ application, “10/501,127”, is at least January 13, 2003, the filing date of the applicants’ PCT application PCT/NL03/00020. SEQ ID NO: 6 and its corresponding sequence information are included as part of PCT application PCT/NL03/00020. (Information gathered from “Continuity Data” found via the PAIR system available at uspto.gov.)

Accordingly, applicants respectfully request withdrawal and reconsideration of the 35 U.S.C. § 102 rejection, as SEQ ID NO:2498 or its corresponding sequence was not described in the cited references before the current application.

Rejections under 35 U.S.C. § 103(a) (item 13-14):

Claims 16, 30, 33-35 and 38-42 are rejected as being unpatentable over Kapur et al. in view of Lutticken et al. (US 4,788,056). Applicants respectfully traverse as set forth herein.

Applicants note that to establish a *prima facie* case of obviousness, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007).

Applicants submit the 35 U.S.C. § 103 rejections are traversed as none of the valid prior art references teach SEQ ID NO:6, as presently claimed. Kapur fails to properly teach SEQ ID NO:6, as Kapur et al. does not have a valid claim to priority with regards to SEQ ID NO:2498, as described previously. Accordingly, applicants request reconsideration and withdrawal of the 35 U.S.C. § 103(a) rejection.

CONCLUSION

In light of the above amendments and remarks, applicants respectfully request reconsideration of the application. If questions remain after consideration of the foregoing, or if the Office should determine that there are additional issues which might be resolved by a telephone conference, the Office is kindly requested to contact applicants’ attorney at the address

or telephone number given herein.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Todd E. North". The signature is stylized with a large, sweeping "T" and "N".

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TEN/ten:csw

Attachments: Replacement drawings
Supplemental Information Disclosure Statement

Document in ProLaw